

Claim Listing

This listing of claims will replace all prior versions, and listings, of claims in the present application.

1. (Previously presented) A method for eliciting a compound having therapeutic activity from a plant or plant part, comprising the steps of:

a) contacting a living, intact plant or plant part with an amount of acetic acid effective to induce the production of the compound from the plant or plant part; and

b) recovering the compound from the plant or plant part into an aqueous medium.

2. (Previously presented) The method of claim 1, wherein the plant or plant part is contacted with acetic acid in a concentration of about 0.1% (v/v) acetic acid.

3. (Previously presented) The method of claim 1, wherein the compound is recovered from an extract or exudate of the plant or plant part into the aqueous medium.

4. (Previously presented) The method of claim 1, wherein the aqueous medium is water.

5. (Canceled)

6. (Previously presented) The method of claim 3, wherein the extracting further comprises macerating the plant or plant parts in an aqueous medium.

7. (Original) The method of claim 1, wherein the plant part is a plant root.

8. (Original) The method of claim 1, wherein the therapeutic activity is selected from the group consisting of anti-microbial activity and anti-cancer activity.

9. (Original) The method of claim 8 wherein the anti-microbial activity is selected from the group consisting of anti-bacterial activity and anti-fungal activity.

10. (Original) The method of claim 1, further comprising providing a chemical library of compounds recovered from the aqueous medium in an amount sufficient to assay from biological activity.

11. (Original) The method of claim 1, wherein the step of extracting the compounds comprises removing cuticular material located on the surface of a leaf by contacting the leaf surface with a solvent.

12. (Previously presented) The method of claim 1, wherein the aqueous medium is a liquid medium or an agar medium.

13. (Original) The method of claim 11, wherein the cuticular material is selected from the group consisting of lipid, wax, cutin, protein, primary metabolite and secondary metabolite.

14. (Original) The method of claim 13, wherein the cuticular material is a wax.

15. (Original) The method of claim 11, wherein the solvent is an organic solvent.

16. (Original) The method of claim 15, wherein the organic solvent is selected from the group consisting of methylene chloride and chloroform.

17. (Previously presented) The method of claim 11, further comprising assaying the solvent for therapeutic activity.

18. (Previously presented) The method of claim 17, further comprising analyzing the solvent to identify an agent which has the therapeutic activity.

19. (Original) The method of claim 17, wherein the therapeutic activity is selected from the group consisting of anti-microbial activity and anti-cancer activity.

20. (Previously presented) The method of claim 19, wherein the anti-microbial activity is selected from the group consisting of anti-bacterial activity and anti-fungal activity.

21. (Previously presented) The method of claim 17, wherein the step of assaying the solvent further comprises contacting the solvent with a medium containing a living microorganism and determining the rate of growth of the microorganism, whereby an inhibition of the growth of the microorganism is indicative of a compound or component in the solvent having therapeutic activity.

22. (Previously presented) The process of claim 1, wherein the plant or plant part is obtained from a plant of a species selected from the group consisting of *Atropa bella-donna*, *Erythrina flabelliformis*, *Ipomoea tricolor*, *Erythrina crista*, *Celosia cristata*, *Gallium spurium*, *Laurus nobilis*, *Vitis labrusca*, *Gratiola officinalis*, *Symphitum officinalis*, *Hosta fortunei*, *Cassia hebecarpa*, *Thalictrum flavum*, *Scutellaria altissima*, *Portulacca oleracea*, *Scutellaria certicola*, *Physalis cretica*, *Geum fauriei*, *Gentiana tibetica*, *Linum hirsutum*, *Aconitum napellus*, *Podophyllum emodii*, *Thymus cretaceus*, *Hosta fortunei*, *Carlina acaulis*, *Chamaechrista fasciculata*, *Pinus pinea*, *Pegamum hamalis*, *Amarindus india*, *Carica*

papaya, *Cistus incanus*, *Capparis spinosa inermis*, *Cupressus lusitanica*, *Diopiros kaka*,
Eryngium campestre, *Aesculus woerlitzenis*, *Aesculus hippocastanum*, *Cupressus*
sempervirens, *Celitis occidentalis*, *Polygonum cuspidatum*, *Elaeagnus, angustifolia*,
Elaeagnus commutata, *Gentiana macrophylla*, *Brassica rapa*, *Sesbania exaltata*, *Sesbania*
speciosa, *Spartina potentiflora*, *Brassica juncea*, *Helianthus annuus*, *Poinsettia*, *Pelargonium*
zonale, *Leontopodium alpinum*, *Lupinus luteus*, *Buxus microphylla*, *Liatris spicata*, *Primula*
japonica, *Betula nigra*, *Filipendula vulgrais*, *Lobelia siphilitica*, *Grevillea robusta*, *Reseda*
luteola, *Gentiana littoralis*, *Campanula carpatica*, *Ageratum conizoides*, *Psidium guajava*,
Ailanthus altissima, *Buxus microphylla japonica*, *Hydrocotyle asiatica*, *Grevillea robusta*,
Brugmansia suaveolens, *Thymus pulegiodes*, *Thymus lema-barona*, *Gaultheria procumbens*,
Thymus serphyllum, *Thymus carnosus*, *Thymus thracicus*, *Calycanthus floridus*, *Zingiber*
officinalis, *Lamium dulcis argenteus*, *Thymus praecox articus*, *Thymus pulegioides*, *Thymus*
speciosa, *Thymus pseudolamginosus*, *Thymus vulgraris*, *Ficus religiosa*, *Forsythia suspensa*,
Chelidonium majus, *Thymus wooly*, *Thymus portugalense*, *Nicotiana tabacum*, *Thymus*
eytridorus aureus, *Cactus officinalis*, *Lablab purpurea*, *Juglans regia*, *Actinidia chinensis*,
Hemerocallis, *Betula pendula*, *Gardenia jasminoides*, *Taxodium distichum*, *Magnolia*
loebherii, *Crataegus praegophyrum*, *Larix deciduas*, *Thuja occidentalis*, *Thuja orientalis*,
Cupressocyparis leylandii, *Pseudotsuga menziesii*, *Abies firma*, *Parthenocissus quinquefolia*,
Allium cernum, *Juniperus conferta*, *Taraxacum officinalis*, *Yucca*, *Ilexaquifolium*, *Tsuga*
canadensis penola, *Ilex cornuta*, *Taxus hiksii*, *Taxus media*, *Metasequoia glyptostroboides*,
Pinus bungiana, *Buxus sempervirens*, *Stewartia koreana*, *Prunus*, *Betula dahurica*, *Plantago*
minor, *Acer palmatum*, *Acer campestre*, *Cotynus coggygia*, *Quercus robur*, *Acer truncatum*,
Achyranthes bidentata, *Allium japonicum*, *Carum capsicum*, *Agastache mexicana*, *Prunella*
vulgaris, *Tagetes minuta*, *Nepeta cataria*, *Ratibida columnifera-fera*, *Aster-Nova anglicae*,
Myrica cerifera, *Pittosporum tobira*, *Taxodium distichum*, *Plantago major*, *Pinus sylvestris*,
Acorus canadensis, *Pieris japonica*, *Pinus strobes*, *Trifolium pretense*, *Prunus serotica*,
Datura stramonium, *Geranium maculate*, *Taxodium distichum*, *Astragalus sinicus*, *Centauria*
maculate, *Ruschia indurate*, *Myrthus communis*, *Platanus occidentalis*, *Licium barbatum*,
Lavandula officinalis, *Grevillea robusta*, *Hippophaë rhamnoides*, *Filipendula ulmaria*,
Polygonum odoratum, *Brugmansia gravcolens*, *Rhus toxicodenta*, *Armoracia rusticana*,
Ficus benjaminii, *Sluffera*, *Pelagonium zonale*, *Allium*, *Asimina trilobla*, *Lippa dulcis*,
Epilobium agustifuolium, *Brugmansia suavecolens*, *Xanthosoma sagittifolium*, *Monstera*
deliciosa, *Aglaonema commutatus*, *Dieffenbachia leopoldii*, *Anthurium andreanum*,
Syngonium podophyllum, *Dracaena fragrans*, *Ananas comosus*, *Strelitzia reglinae*,

Diffenbachia segiunae, *Syngonium aurutum*, *Dracaena*, *haemanthus katharina*, *Anthurium altersianum*, *Spathiphyllum grandiflorum*, *Spathiphyllum cochlearispatum*, *Monstera pertusa*, *Anthurium magnificum*, *Anthurium hookeri*, *Anthurium elegans*, *Calathea zebrina*, *Yucca elephantipes*, *Bromelia balansae*, *Musa textiles*, *Myrthus communis*, *Olea olcaster*, *Olea europaea*, *Verium oleander*, *Cocculus laurifolius*, *Microsorium punctatum*, *Ficus*, *Senseviera*, *Adansonia digitata*, *Boechimeria boloba*, *Piper nigrum*, *Phymatosorus scolopendria*, *Turnera ulmifolia*, *Nicodemia diversifolia*, *Tapeinochilos spectabilis*, *Rauwolfia tetraphylla*, *Ficus elastica*, *Cycas cirinalis*, *Caryota ureus*, *Cynnamonum zeylonicum*, *Aechmea luddemoniana*, *Foenix seulongica*, *Ficus benjamina*, *Ficus pumila*, *Murraya exotica*, *Trevesia sungaica*, *Clerodendrum speciosissimum*, *Actinidi colonicta*, *Paeonia lactiflora*, *Paeonia suffruticosa*, *Quercus imbricaria*, *Iris alida*, *Portulacca oleracea*, *Poligonum aviculare*, *Iris pseudocarpus*, *Allium nutans*, *Allium fistulosum*, *Anthericum ramosum*, *Veratrum nigrum*, *Polygonum latifolia*, *Hosta lanceifolia*, *Hosta zibalda*, *Echinops spheeris*, *Paeonia dahurica*, *Inula helenium*, *Trametes pontica*, *Digitalis lutea*, *Baptisia australis*, *Austrocyathus australis*, *Hyssopus zosterifolius*, *Feucrium ham. edris*, *Sedum album*, *Heracleum pubescens*, *Origanum vulgare*, *Cachrys alpina*, *Asarum trilobum*, *Matteuccia struthiopteris*, *Sedum telchium*, *Bocconia cordata*, *Ajuga reptans*, *Thalictrum minus*, *Anemone japonica*, *Clematis recta*, *Thalictrum*, *Alchemilla*, *Potentilla alba*, *Poterium sanguisorba*, *Menispermum dauricum*, *Oxybaphus nyctagineus*, *Armoracia rusticana*, *Crambe cordifolia*, *Arimonia eupatoria*, *Anchusa officinalis*, *Polygonum ceruleum*, *Valeriana officinalis*, *Pulmonaria mollissima*, *Stachys lanata*, *Coronilla varia*, *Platycarya grandiflora*, *Lavandula officinalis*, *Vincetoxicum officinale*, *Acalypha hispida*, *Gnaphalium gnomon*, *Psychotria nigropunctata*, *Psychotria metbacterioides*, *Codiaeum variegatum*, *Phyllanthus grandifolius*, *Pterigota alata*, *Pachira affinis*, *Sterculia elata*, *Philodendron speciosum*, *Pithecellobium unguis-cati*, *Sanchezia nobilis*, *Oreopanax capitatum*, *Ficus triangularis*, *Kigelia pinnata*, *Piper cubeba*, *Laurus nobilis*, *Erythrina caffra*, *Metrosideros excelsa*, *Osmanthus fragrans*, *Cupressus sempervirens*, *Jacquinia*, *Senecio platyphylloides*, *Livistona chinensis*, *Tetraclinis articulata*, *Eucalyptus rudis*, *Podocarpus spinulosus*, *Eriobotrya japonica*, *Ginkgo biloba*, *Rhododendron*, *Fagopyrum suffruticosum*, *Geum macrophyllum*, *Magnolia kobus*, *Vincetoxicum minor*, *Convallaria majalis*, *Corylus avellana*, *Berberis*, *Rosa multiflora*, *Ostrya carpinifolia*, *Ostrya conoidea*, *Quercus rubra*, *Liriodendron tulipifera*, *Sorbus aucuparia*, *Betula nigra*, *Castanea sativa*, *Bergenia crassifolia*, *Artemisia dracunculus*, *Ruta graveolens*, *Quercus nigra*, *Schisandra chinensis*, *Betula alba*, *Sambucus nigra*, *Gentiana cruciata*, *Encephalartos horridus*, *Phlebodium*

aureum, *Microlepia platyphylla*, *Ceratozamia mexicana*, *Stenochlaena tenuifolia*, *Adiantum trapeziforme*, *Adiantum raddianum*, *Lygodium japonicum*, *Pessopteris crassifolia*, *Asplenium australasicum*, *Agathis robusta*, *Osmunda regalis*, *Osumdastrum claytonianum*, *Phyllitis scolopendrium*, *Polystichum braunii*, *Crtomium fortunei*, *Dryopteris filix-mas*, *Equisetum variegatum*, *Athyrium nipponicum*, *Athyrium filix-femina*, *Parthenocissus tricuspidata*, *Ligusticum vulgare*, *Chamaeciparis pisifera*, *Rosa canina*, *Cotinus coggygria*, *Pinus strobes*, *Celtis occidentalis*, *Picca schrenkiana*, *Cydonia oblonga*, *Ulmus pumila*, *Euonymus verrucosus*, *Deutzia scabra*, *Mespilus germanica*, *Quercus castaneifolia*, *Euonymus europea*, *Securinega suffruticosa*, *Koelreuteria paniculata*, *Syringa josikaea*, *Zelkova carpinifolia*, *Abies cephalonica*, *Taxus baccata*, *Taxus cuspidate*, *Salix babylonica*, *Actinidia colomicta*, *Mahonia aquifolium*, *Aralia mandschurica*, *Juglans nigra*, *Euonymus elata*, *Prinsepia sinensis*, *Forsythia europaea*, *Sorbocotoneaster pozdnjakovii*, *Morus alba*, *Crataegus macrophyllum*, *Eucommia ulmifolia*, *Sorbus commixta*, *Philodendron amurense*, *Cornus mas*, *Kerria japonica*, *Parrotia persica*, *Jasminum fruticans*, *Swida sanguinea*, *Pentaphylloides fruticosa*, *Sibiraea altaiensis*, *Cerasus japonica*, *Kolkwitzia amabilis*, *Amigdalus nana*, *Acer mandschurica*, *Salix tamarisfilia*, *Amelanchier spicata*, *Cerasus mahaleb*, *Prunus cerasifera*, *Corylus avellana*, *Acer tataricum*, *Viburnum opulus*, *Syringa vulgaris*, *Fraxinus excelsior*, *Quercus trojana*, *Chaenomelis superba*, *Pinus salinifolia*, *Berberis vulgaris*, *Cotoneaster horisontalis*, *Cotoneaster fangianus*, *Fagus sylvatica*, *Pinus pumila*, *Pinus sylvestris* and *Berberis thunbergii*.

23. (Previously presented) A method of preparing a composition having therapeutic activity, comprising the steps of:

(a) contacting a living, intact plant or plant part with an amount of acetic acid effective to induce the production of a compound or component having therapeutic activity from the plant or plant part; and

b) collecting the composition comprising the compound or component.

24. (Original) The method of claim 23, wherein the composition is collected by macerating the plant or plant parts in an aqueous medium.

25. (Original) The method of claim 23, wherein the composition is collected by contacting a surface of the plant or plant parts with a solvent suitable for removing cuticular or epicuticular material.

26. (Previously presented) The method of claim 23, wherein the amount of acetic

acid is about 0.1% (v/v) acetic acid.

27. (New) The method of claim 1 wherein the plant part is selected from the group consisting of a shoot, a leaf, a root and a seed.